

Abstract:

Source: FR2536922A1 The invention relates to a novel logic comparator particularly suited to producing simple comparison functions (for example determination of a majority of 0 or 1 levels in a set), and also suited to circuits employing both logic signals and analogue signals. This comparator comprises an amplifier A with large gain, input capacitors CE1 to CE4 whose values are preferably weighted according to a binary code, a comparison capacitor CC1 and switching means for applying, in a first phase b, a first logic level VSS to the input capacitors and a second level VDD to the comparison capacitor, and in a second phase c, arbitrary logic levels to the input capacitors and a voltage VC1 which differs from the second level VDD to the comparison capacitor. This comparator can be used for digital filtering by applying the outputs from a shift register as input levels.